REMARKS

Claim 1 has been amended to incorporate the subject matter of Claim 4. Claim 6 has been amended to correct its dependency. Claims 4 and 5 have been canceled. Upon entry of this Amendment, which is respectfully requested, Claims 1-3 and 6-11 will be pending.

Response to Claim Rejections Under 35 U.S.C. § 102

Claims 1-3, 5 and 6 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by JP 2003-249233 to Ootsuki et al. Applicants respectfully traverse.

Claim 1 has been amended to incorporate the subject matter of Claim 4, which is not part of the present rejection.

Moreover, JP '233 discloses, in Example 1, an electrolyte comprising γ-butyrolactone and a phosphazene derivative A represented by the formula (IV): $(NPR^5_2)_n$, wherein n is 3, two of Rs are ethoxy groups and four thereof are fluorine. JP '233 further discloses, in Example 5, an electrolyte comprising γ-butyrolactone and a phosphazene derivative B represented by formula (IV): $(NPR^5_2)_n$, wherein n is 3, one of Rs is methoxy group and five thereof are fluorine. According to JP '233, the phosphazene derivative A used in the Example 1 has a boiling point of 195°C, γ-butyrolactone has a boiling point of 204°C and the phosphazene derivative B used in the Example 5 has a boiling point of 110°C. *See,* paragraphs [0103] and [0092].

However, JP '233 fails to disclose or suggest a non-aqueous electrolyte comprising at least one aprotic organic solvent selected from the group consisting of ethylene carbonate, propylene carbonate, diethyl carbonate, dimethyl carbonate, ethyl methyl carbonate and methyl formate, and further comprising a phosphorus and/or nitrogen containing compound having a boiling point difference from that of the respective aprotic organic solvent of not more than 25°C, as presently claimed.

As shown in Tables 1-3 of the present specification, when the difference between the boiling point of the aprotic organic solvent and the phosphorus and/or nitrogen containing compound is not more than 25°C, the aprotic organic solvent and the phosphorus and/or nitrogen containing compound vaporize at a similar temperature. Thus, even when the aprotic organic solvent exists as a gas or a liquid, the aprotic organic solvent coexists with the phosphorus and/or nitrogen containing compound, and as a result, the risk of igniting the non-aqueous electrolyte is highly reduced. *See* paragraph [0024] of the present specification.

JP '233 provides no motivation for using a phosphorus and/or nitrogen containing compound having a boiling point difference from that of the respective aprotic organic solvent of not more than 25°C, when the aprotic organic solvent is at least one selected from the group consisting of ethylene carbonate, propylene carbonate, diethyl carbonate, dimethyl carbonate, ethyl methyl carbonate and methyl formate.

Thus, JP '233 fails to anticipate or render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

Response to Claim Rejections Under 35 U.S.C. §§ 102/103

A. Claims 1-6 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over WO/2003/005479 to Otsuki et al. Applicants respectfully traverse.

WO '479 discloses, in Example 1, an electrolyte of comprising diethyl carbonate, ethylene carbonate, and a phosphazene derivative represented by the formula (2); $(PNR^4_2)_n$ wherein n is 3 and the ratio (EO/F) of ethoxy group (EO) to fluorine (F) in R^4s is 2/4. Diethyl carbonate has a boiling point of 127°C, ethylene carbonate has a boiling point of 238°C and the plosphazene derivative of Example 1 has a boiling point of 195°C. *See* paragraph [0103] of the

present specification. Thus, the phosphazene derivative used in the Example 1 has a boiling point difference from that of diethyl carbonate and ethylene carbonate of more than 25°C.

In addition, WO '479 discloses, in Example 7, an electrolyte of comprising diethyl carbonate, ethylene carbonate and a phosphazene derivative represented by the formula (2): $(PNR^4_2)_n$, wherein n is 3 and the ratio (EO/F) of ethoxy group (EO) to fluorine (F) in R^4s is 1/5. Diethyl carbonate has a boiling point of 127°C, ethylene carbonate has a boiling point of 238°C and the phosphazene derivative used in the Example 7 has a boiling point of 115°C. *See,* Table 5 in WO '479. Thus, the electrolyte of the Example 7 does not comprise a phosphorus and/or nitrogen containing compound having a boiling point difference from that of ethylene carbonate of not more than 25°C.

As shown in Tables 1-3 of the present specification, when the difference of the boiling point between the aprotic organic solvent and the phosphorus and/or nitrogen containing compound is not more than 25°C, the aprotic organic solvent and the phosphorus and/or nitrogen containing compound vaporize at a similar temperature. Thus, even when the aprotic organic solvent exists as a gas or a liquid, the aprotic organic solvent coexists with the phosphorus and/or nitrogen containing compound, and as a result, the risk of igniting the non-aqueous electrolyte is highly reduced. *See,* paragraph [0024] of the present specification.

WO '479 provides no motivation for using a phosphorus and/or nitrogen containing compound having a boiling point difference from that of the respective aprotic organic solvent of not more than 25°C.

Thus, WO '479 fails to anticipate or render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

B. Claims 7-11 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over WO/2003/005478 to Otsuki et al. Applicants respectfully traverse.

WO '478 discloses, in Example 1, an electrolyte comprising diethyl carbonate, ethylene carbonate and a phosphazene derivative represented by the formula (2): $(PNR^4_2)_n$ wherein n is 3 and the ratio (EO/F) of ethoxy group (EO) to fluorine (F) in R^4s is 2/4. Diethyl carbonate has a boiling point of 127°C, ethylene carbonate has a boiling point of 238°C, and the phosphazene derivative used in the Example 1 has a boiling point of 195°C. *See,* paragraph [0103] of the present specification. Thus, the phosphazene derivative used in the Example 1 has a boiling point difference from that of each of diethyl carbonate and ethylene carbonate of more than 25°C.

In addition, WO '478 discloses, Example 2, an electrolyte comprising diethyl carbonate, ethylene carbonate and a phosphazene derivative represented by the formula (2): $(PNR^4_2)_n$ wherein n is 3 and the ratio (EO/F) of ethoxy group (EC)) to fluorine (F) in R^4s is 1/5. Diethyl carbonate has a boiling point of 127°C, ethylene carbonate has a boiling point of 238°C, and the phosphazene derivative used in the Example 2 has a boiling point of 115°C. *See,* Table 5 of WO '479. Thus, the electrolyte of the Example 2 does not comprise a phosphorus and/or nitrogen containing compound having a boiling point difference from that of ethylene carbonate of not more than 25°C.

As show in Tables 4-5 of the present specification, when the boiling point difference between the aprotic organic solvent and the phosphorus and/or nitrogen containing compound is not more than 25°C, the aprotic organic solvent and the phosphorus and/or nitrogen containing compound vaporize ata similar temperature. Thus, even when the aprotic organic solvent exists

as a gas or a liquid, the aprotic organic solvent coexists with the phosphorus and/or nitrogen containing compound, and as a result, the risk of igniting the non-aqueous electrolyte is highly reduced. *See,* paragraph [0024] of the present specification.

WO '478 provides no motivation to use a phosphorus and/or nitrogen containing compound having a difference of a boiling point from that of the respective aprotic organic solvent of not more than 25°C.

Thus, WO '478 fails to anticipate or render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

Response to Claim Rejections Under 35 U.S.C. § 103

A. Claim 4 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP '233.

Without commenting on the merits of the rejection, Claim 4 has been canceled, thereby rendering the present rejection moot. Accordingly, withdrawal of the rejection is respectfully requested.

B. Claims 1-6 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over WO/2003/005479. Applicants respectfully traverse.

For the reasons discussed above, WO '479 fails to render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

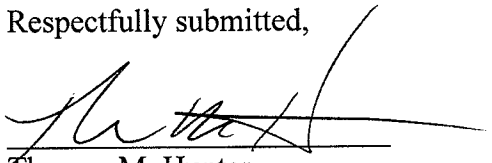
C. Claims 7-11 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over WO/2003/005478. Applicants respectfully traverse.

For the reasons discussed above, WO '479 fails to render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Thomas M. Hunter
Registration No. 64,676

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

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